

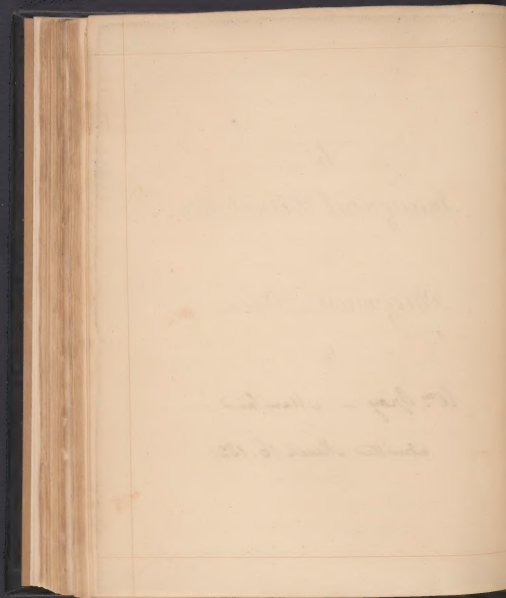
Feb. 21.

An
Inaugural Dissertation
on
Phlegmasia Dolens,
by —

Wm. Gray — Maryland

admitted March 16. 1821

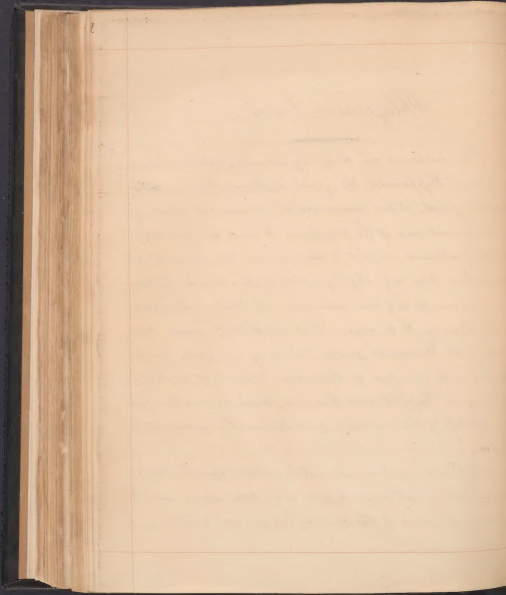
English



Phlegmasia Dolens.

This disease is one of a very interesting nature: And since the time of Hippocrates the great Father of Medicine until the present period, it has commanded the attention and talents of several eminent men of the profession. It must have been coeval with the complaints incident to the puerperal state, though it appears to have been only slightly noticed by the Ancients. I believe it is a disease of very rare occurrence. Mr. White of Manchester, in his Inquiry, &c. &c. says — That out of 1097 women delivered at the Westminster general Dispensary, five only were attacked with it: and of 8000 women delivered at the Manchester Lying-in-Hospital and their own houses, no more than four were affected by this complaint; and I believe it is equally rare in America.

Dr. Dewees (if I am not mistaking) stated before the Medical Society, that he had delivered upwards of 8000 women, and but seven or eight cases of this disease had occurred to him.



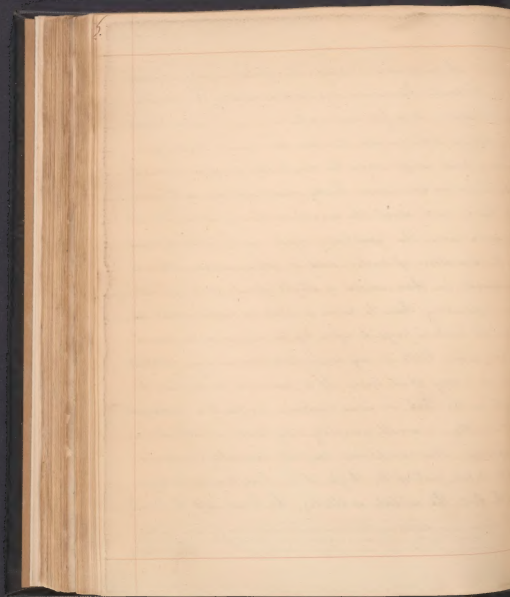
General History.

Phlegmasia Dolens principally affects women in the puerperal state; but to this general rule there are a few exceptions, cases of the disease having appeared in the male; also in the female independently of the parturient state. It is very irregular as to the time of its appearance; sometimes commencing in twenty-four or forty-eight hours after delivery, and at other times not until a month, or even six weeks have elapsed; but in general the attack takes place from the tenth to the sixteenth day after parturition.

It usually comes on with a pain, uneasiness, or stiffness in the Lumbar, Hypogastric, or Inguinal regions, accompanied by a considerable degree of fever, which is sometimes preceded by cold sensations, and vice versa. In the course of a few hours after the attack, the limb swells, becomes very tense, extremely painful, and very tender to the touch; in fact, so very tender is the part, that with great difficulty the patient permits you to touch the limb. The external appearance is puerperally white and of a glossy shining aspect. The swelling and tumefaction extends from the groin to the foot & Labium

pendendi of the same side only. The affected extremity frequently arrives at double the natural size, and sometimes to a much greater extent; it is hot and very tender, but is not attended with any redness of the surface; it is even and equable to the touch in every part except where the conglobate glands are situated, which are in some cases knotty and hard, as in the groin, the ham, and about the middle of the leg at its back part. In some cases, the lymphatic vessels can be distinctly traced by the sensation of touch; and in other instances there is perceived in their course a slight streak of a scarlet hue, indicating them to be in a state of inflammation. When the limb is pressed upon by the finger it is found to be elastic, little if any impression remaining, and that only for a very short time. If a puncture or incision be made in the limb, in some instances no fluid is discharged; but in others a small quantity only issues out which soon coagulates. This complaint does not invariably commence, at the upper part of the thigh; it has been known to begin in the foot, the middle of the leg, the ham and the knee.*

* Professor Jones stated to me, that in one case that came under his notice, the first symptom observed by the patient was a violent pain in the calf of the leg; and in another case, the patient was seized with pain in the heel extending up the course of the lymphatics.



It is of little importance to the patient in which of these situations it fixes its grasp, for in a very short time it is diffused throughout the extremity.

The most frequent termination of the disease is in resolution, or a removal of the effused fluid by the absorbents; it sometimes (though I believe very rarely) terminates in suppuration. Whenever the latter result occurs, it is either from neglect or improper treatment; at last in a majority of cases.

Phlegmasia Dolens never attacks both limbs at one time; but it is frequently translated from the one to the other. Women in all situations, and under every circumstance, are liable to an attack of the disease in question: The rich, the poor, the delicate and the robust, those who give suck, and those who do not.* It does not appear to depend upon the state of the lochial discharge, nor upon the habits of the individual, as regards exercise and diet: it occurs in the country as well as city; to those who had every possible attendance, and to those who had none at all; after their first, or any other labour, and whether the labour be natural, proternatural, or complex.

* Out of 12 cases related by Mr. White, eight of the patients did not give suck.

4.2

Scirrhus Lactis.

I am inclined to believe, from a variety of instances connected with the nature and treatment of this disease, and the state of pregnancy and parturition predisposes the woman to an attack of this disorder. But if we place any reliance on the judgment and observation of L.^r Robert Brown and I see no reason to doubt either, we must be convinced of the reality of its appearance in the female independently of every state connected with parturition.*

And if we consult L.^r Kornari Medical Histories and Apoplexions vol. iii we shall find cases related where it occurs in the male subject.

Mr. White in his dissertation on this complaint, observes page 46 "and it may be owing to an inflammation brought on the breast or breast of the lymphatics, or on the glands, by the pressure of the child's head upon them during the pangs of labor, this may produce an adhesion of the cells of these glands, and make them impervious, and cause stagnation

* See Lactis a Scirrhus page 227

12.

of length in the vessel, and thereby, cause the same
 to be so situated that it discharges its contents upon an inflammation
 of the vessels and contiguous parts, viz. a sinus, but to be open
 and manner of accounting for this inflammation, I will leave to your
 decision.

1. That nearly the same kind of pressure exists in the
 vessels of the placenta for some time before delivery, as at the time
 of labour.

2. That Phlegmasia Dolens does occur in cases that
 have had the most natural and easy labour, where it is pre-
 sumed no such violent pressure does take place.

3. That independently of every State connected with pre-
 sentation the disease has been known to exist.

After making another conjecture, Mr. White, page 47
 asks the following question. "Is it not more probable that this
 disease is owing to the child's head pressing the lymphatics on
 or on vessels which arise from one of the lower extremities,
 against the brim of the pelvis during a labour, pain, &c.
 to stop the progress of the lymph, and the sacra preventing a
 reabsorption, the vessel at last bursts and sheds its contents,

though its cords should be allowed to be stronger than those of the blood vessels? We should not hesitate a moment, I think, in answering this question in the negative; for

1. If a rupture of the lymphatics did take place in the puerperal parturition, might not the disease in every instance be manifested immediately after delivery, or what becomes of the elevated system during the space of ten, fifteen or twenty days after the accident?

2. In cases that have received the intervention of the Military Surgeons, where the certainty of the lymphatic system having been divided is self evident from the very nature of the operation: but still the disease is never the consequence?

3. In the application of the Ligature upon the external or external of the lymphatic has never been known as a cause, cause, or even suspected.

Dr. Hall, page 148 observes "that the predisposing cause appear to be an increased irritability and disposition to inflammation, which prevails during pregnancy, and in a still higher degree for some time after parturition." — In p. 1, the exciting cause he enumerates the following:

"Violent motions of the muscles inserted into the pelvis, or thighs; contusions of the cutaneous membrane connected with these muscles during a tedious labor; the application of cold and moisture; suppression or diminution of the lochia and of the secretion of milk; food taken in too large quantities as if too stimulating a quality, especially when the patient does not give such."

When we come to consider that the disease occurs in all conditions of life and locality of location, and under every circumstance regarding parturition; in the city as well as in the country, on the mountain and in the valley, whether the lochia be moderate or profuse, and whether the woman give milk or not. I say, when we take into view these circumstances, does it not evidently appear that few of the preceding observations are worthy of much attention?

Proximate Cause.

This disease has been attributed to suppression of the lochia, to deposits or redundancies of milk, and to cold.

Havericars, a Spanish writer, imagined it to be a reflux of the lochia in the part.



mes attributs il se agit de l'acte de ce r. ing.

It is not a good one, in fact, as the
water is so low, there are only a few of the
fish and a shoal of what is called a "white fish".

He writes saying, "that the proximate cause of this is an
a. an obstruction, detention and accumulation of yin in the
liver, and that this obstruction is occasioned by some accident
operating during infancy, or some state, peculiar to child-hood,
or the disorder not, perhaps depending on disease."

I have already stated that the disease is on continued to
spring in seasons alone; but that it occurs in the female
individually as a habit; and, upon the authority of
writers and others even in the same subject.

1. The "white" line, referred to above appears in the lymphatics.
2. The less extension of the capillary vessels, or complete closure there
exists, and thus forming the obstruction. The days June 24
61, is the crisis made in the capillary vessels, and the diameter
of the tube is reduced, or complete totally closed by the rupture
of the capillary vessel, and the capillary vessels thus become occluded.
and it is not 3. but 4. but 5. but 6. but 7. but 8. but 9. but 10. but 11. but 12. but 13. but 14. but 15. but 16. but 17. but 18. but 19. but 20. but 21. but 22. but 23. but 24. but 25. but 26. but 27. but 28. but 29. but 30. but 31. but 32. but 33. but 34. but 35. but 36. but 37. but 38. but 39. but 40. but 41. but 42. but 43. but 44. but 45. but 46. but 47. but 48. but 49. but 50. but 51. but 52. but 53. but 54. but 55. but 56. but 57. but 58. but 59. but 60. but 61. but 62. but 63. but 64. but 65. but 66. but 67. but 68. but 69. but 70. but 71. but 72. but 73. but 74. but 75. but 76. but 77. but 78. but 79. but 80. but 81. but 82. but 83. but 84. but 85. but 86. but 87. but 88. but 89. but 90. but 91. but 92. but 93. but 94. but 95. but 96. but 97. but 98. but 99. but 100. but 101. but 102. but 103. but 104. but 105. but 106. but 107. but 108. but 109. but 110. but 111. but 112. but 113. but 114. but 115. but 116. but 117. but 118. but 119. but 120. but 121. but 122. but 123. but 124. but 125. but 126. but 127. but 128. but 129. but 130. but 131. but 132. but 133. but 134. but 135. but 136. but 137. but 138. but 139. but 140. but 141. but 142. but 143. but 144. but 145. but 146. but 147. but 148. but 149. but 150. but 151. but 152. but 153. but 154. but 155. but 156. but 157. but 158. but 159. but 160. but 161. but 162. but 163. but 164. but 165. but 166. but 167. but 168. but 169. but 170. but 171. but 172. but 173. but 174. but 175. but 176. but 177. but 178. but 179. but 180. but 181. but 182. but 183. but 184. but 185. but 186. but 187. but 188. but 189. but 190. but 191. but 192. but 193. but 194. but 195. but 196. but 197. but 198. but 199. but 200. but 201. but 202. but 203. but 204. but 205. but 206. but 207. but 208. but 209. but 210. but 211. but 212. but 213. but 214. but 215. but 216. but 217. but 218. but 219. but 220. but 221. but 222. but 223. but 224. but 225. but 226. but 227. but 228. but 229. but 230. but 231. but 232. but 233. but 234. but 235. but 236. but 237. but 238. but 239. but 240. but 241. but 242. but 243. but 244. but 245. but 246. but 247. but 248. but 249. but 250. but 251. but 252. but 253. but 254. but 255. but 256. but 257. but 258. but 259. but 260. but 261. but 262. but 263. but 264. but 265. but 266. but 267. but 268. but 269. but 270. but 271. but 272. but 273. but 274. but 275. but 276. but 277. but 278. but 279. but 280. but 281. but 282. but 283. but 284. but 285. but 286. but 287. but 288. but 289. but 290. but 291. but 292. but 293. but 294. but 295. but 296. but 297. but 298. but 299. but 300. but 301. but 302. but 303. but 304. but 305. but 306. but 307. but 308. but 309. but 310. but 311. but 312. but 313. but 314. but 315. but 316. but 317. but 318. but 319. but 320. but 321. but 322. but 323. but 324. but 325. but 326. but 327. but 328. but 329. but 330. but 331. but 332. but 333. but 334. but 335. but 336. but 337. but 338. but 339. but 340. but 341. but 342. but 343. but 344. but 345. but 346. but 347. but 348. but 349. but 350. but 351. but 352. but 353. but 354. but 355. but 356. but 357. but 358. but 359. but 360. but 361. but 362. but 363. but 364. but 365. but 366. but 367. but 368. but 369. but 370. but 371. but 372. but 373. but 374. but 375. but 376. but 377. but 378. but 379. but 380. but 381. but 382. but 383. but 384. but 385. but 386. but 387. but 388. but 389. but 390. but 391. but 392. but 393. but 394. but 395. but 396. but 397. but 398. but 399. but 400. but 401. but 402. but 403. but 404. but 405. but 406. but 407. but 408. but 409. but 410. but 411. but 412. but 413. but 414. but 415. but 416. but 417. but 418. but 419. but 420. but 421. but 422. but 423. but 424. but 425. but 426. but 427. but 428. but 429. but 430. but 431. but 432. but 433. but 434. but 435. but 436. but 437. but 438. but 439. but 440. but 441. but 442. but 443. but 444. but 445. but 446. but 447. but 448. but 449. but 450. but 451. but 452. but 453. but 454. but 455. but 456. but 457. but 458. but 459. but 460. but 461. but 462. but 463. but 464. but 465. but 466. but 467. but 468. but 469. but 470. but 471. but 472. but 473. but 474. but 475. but 476. but 477. but 478. but 479. but 480. but 481. but 482. but 483. but 484. but 485. but 486. but 487. but 488. but 489. but 490. but 491. but 492. but 493. but 494. but 495. but 496. but 497. but 498. but 499. but 500. but 501. but 502. but 503. but 504. but 505. but 506. but 507. but 508. but 509. but 510. but 511. but 512. but 513. but 514. but 515. but 516. but 517. but 518. but 519. but 520. but 521. but 522. but 523. but 524. but 525. but 526. but 527. but 528. but 529. but 530. but 531. but 532. but 533. but 534. but 535. but 536. but 537. but 538. but 539. but 540. but 541. but 542. but 543. but 544. but 545. but 546. but 547. but 548. but 549. but 550. but 551. but 552. but 553. but 554. but 555. but 556. but 557. but 558. but 559. but 560. but 561. but 562. but 563. but 564. but 565. but 566. but 567. but 568. but 569. but 570. but 571. but 572. but 573. but 574. but 575. but 576. but 577. but 578. but 579. but 580. but 581. but 582. but 583. but 584. but 585. but 586. but 587. but 588. but 589. but 590. but 591. but 592. but 593. but 594. but 595. but 596. but 597. but 598. but 599. but 600. but 601. but 602. but 603. but 604. but 605. but 606. but 607. but 608. but 609. but 610. but 611. but 612. but 613. but 614. but 615. but 616. but 617. but 618. but 619. but 620. but 621. but 622. but 623. but 624. but 625. but 626. but 627. but 628. but 629. but 630. but 631. but 632. but 633. but 634. but 635. but 636. but 637. but 638. but 639. but 640. but 641. but 642. but 643. but 644. but 645. but 646. but 647. but 648. but 649. but 650. but 651. but 652. but 653. but 654. but 655. but 656. but 657. but 658. but 659. but 660. but 661. but 662. but 663. but 664. but 665. but 666. but 667. but 668. but 669. but 670. but 671. but 672. but 673. but 674. but 675. but 676. but 677. but 678. but 679. but 680. but 681. but 682. but 683. but 684.



In the same manner, I do not think it is the same
surface of the intestine.

Dr Hall, in his Essay on this disease says, page 246 "That
the proximate cause is an inflammation of the mucous, collector
membrane, and innermost surface of the testis, and in some cases
the inflammation may be communicated from the testes
to the large blood vessels, nerves, and the sympathetic vessels and glands
imbedded in them."

Much credit is due the Doctor for his ingenious estimate of
the parts affected: if he had but comprehended in this calculation
the Pericestum, the testes and their appendages, he would cer-
tainly have hit upon the seat of the disease. He contemplates as
a number of parts whose actions are entirely distinct. He
knows that the entire Testis is a very vascular membrane, and
that its surface in the healthy state assumes red fimbriae: but ac-
cording to this theory, this must be rejected when it is in a
state of inflammation a circumstance entirely opposite to
actual observation, and contrary to the not unproved doctrine
of inflammation.*

* See, for example, Sabaud's



The range of phenomena here considered its extension out of the ordinary, is extended in the greatest degree. "It will not stand, you see," but it must be so universally, be sure that it is possible, that the original seat of inflammation and in consequence may, in some instances, be in the gland just named, of the necessity, and the fact is, even analogous to the inflammation of the bronchus will be the same reaction in regard to inflammation in the same tissue, as in the case of the glands the sub-stance of the glands.

It has now a series of the same phenomena with the same. The evidence that an affection of the same structure and organs is the basis of the pathology.

2. Ferriar, in his Medical Treatise on the subject says "that the primary cause is an inflammatory affection of the absorbed tissue; the true swelling of the cells is obvious. "Naturally, even the distinction between the stage of effusion effected, and the stage of the degeneration system: the absorbed are round and separate, by forming their function by the thickening of the cells and the distention of the glands; but the action being in a second state the exhalants continue to pour out their fluid, but not being absorbed must stagnate in the cellular membrane."

Dr. S. in the week above stated, he has not lost as much
 of vision, which I think is very good to see in the time he has
 adopted. In the case of a gentleman who was affected with
 this disease, the Doctor observed, June 24. 1800, "for afflicting
 my hand, 'a great hardness and enlargement in the glands
 of the groin and those of the arm: the vessels could be felt much
 enlarged and increased for a little way above the arm, but
 the extensive tension of the skin prevented me from touching
 them to any considerable distance."

I found of mine gave me a curious account of a
 case that came under his notice: "Upon examination,"
 says he, "I found three abscesses, which formed an eleva-
 tion in the groin, one just above the knee on the inner
 side, and one in the crotch of the leg: they all appeared to
 be independent, for there was no opening of one into the
 other."

It is not probable that, in this case, suppuration was
 confined to the glands of the groin only.¹⁷

¹⁷ I observed with the most attention, the progress of this case,
 from the first appearance of the abscesses, until the cure was
 effected, and all in the collection of the Jolla Mountains and General Walker,
 and to get the best of it.



During the last few years, however, the most important thing
for the dentist, I shall now venture to say, has been
the discovery of a new and entirely new system of teeth,
namely the hypsodont system of the horse. I have often been
quoted the opinion of those very respectable dentists, Messrs
Linnman and Goussier, and I am going to have it in my
power to add to them the name of Dr. Joseph James who has
had no little experience in the subject.

Treatment.

In giving the treatment of this disease, I shall divide it into two
stages, and first, the inflammatory stage. In this stage the
teeth, system, when the patient is healthy, is almost
perfect, and is not except in those cases where the patient has
been subjected to some other disease, or excessive drinking, or
loss of sleep, or loss of the teeth, and very much settled.

The indications are

- 1st To open the system and remove the hairs.
- 2nd To remove the inflammation, and to stop the
teeth, the first indication is to remove the

bloodletting. some education must be regulated as to its extent,
by the discretion and sound judgment of the treating physician.
It may, perhaps, be necessary to avoid venous section entirely.
Dr. J. W. H. says it is a sure, but the risk is not small, and
must be taken in the constitution of the patient.

Co-operation with Dr. Lupton will be most in order.
The attraction of the morbid acid should be fairly done
instead in the first case, in the second, afterwards the acids
may be kept gently down by one of the milder acids, and I would
prevent the progress of the morbid acid.

If these remedies have been used, we may then
direct to the patient it necessary to remove the pain; and we
should require perfect rest and a moderate diet.

As to the second indication in some cases, I suppose
may be resorted to. When determined the blood to the surface
and thereby induce a crisis, from a sweet, thus liberating
from the morbid matter, they produce excitement, regulate
arterial action, counteract irritation, both general and local,
remove the pain and tension, and in some cases lead to
a cure of the swelling. Some one of the antispasmodic preparations



in general red, but may be tinted from the
at intern. & blue on a d. of growth. It is not
may be given either in the Nitro of Nitron, or in
there is no in combination with Nitro Intake, common Nitro,
in the reduction of $g \times x$ to the base and $g \times x$ to the
and rounded away to $P \times P$, and

The bed stand in our chamber, of American style,
and a nice express, America &c. The Movable lamp
was mounted by a young French man, he said, he will in
general very probably meet a number of his countrymen.

Proctor appeared in the upper end of the
Bay, and to the east of the c. 1000 year impact and
about 5000 is indicated.

It is a cold nervous contraction that is a remedy, & great utility. It concentrates the system by removing the pain and irritation, it produces an effusion, from the capillary ends, and then commences the sweating. It is better a cure by changing hot veins into veins, the circulation,



There is a note and I am very much indebted to you for it
it is a very good one. I should be obliged to you to forward
it to me.

Love & affection of mine is highly recommended by
Dr. Keene but I receive it is rarely used because to do this
is to do it.

I am sure it would still give a very good effect, after the above
has been tried, as it would not be necessary, given so as
to bring on a physician. This will seldom fail of producing
more.

Dr. Keene of New York also of recommends the applica-
tion of spirits and calomel combined, which he himself
has often produced the best effects.

I come now to the Udewalton stage. At this period of
the disease we consider that external action has been subdued,
and little of the complaint remains except the swelling of
the limb. The extremity now puts on a fleshy appearance,
and when pressed upon by the finger the impression remains
for some time. The treatment is very chiefly of a local application
but unless so it is useless unless it is the first of the good system.



There may be great debility; in which case, exercise will be
 frequent or there may exist considerable plethoric action. When the
 latter is ascertained with any accuracy, certainly, in the various
 systems I should recommend Exercise and Sleep in the proper
 hour of day; of the latter and part of the former; to be repeated
 every 3 or 4 hours. There is a valuable Local application, and one
 that should not be neglected in the plethoric cases or headache, ap-
 plied from the foot to the groin. Friction with the unguentated
 Quercorn. The Quercorn is warm and is, with many such of its kind, and
 is applied to the groin as a highly recommended by Boerhaave.
 It is an old woman's remedy that is worthy of notice. I
 observe of a foot's gait. Spread in brandy or this, on a wetted
 towel a few times during the day. Friction should be with the mud
 - which is better with the flesh brush. The treatment must not
 be allowed to stand as waste too much, and one must advise
 the use of an exercise to be continued for some considerable time
 after the patient is well.

I have got another matter to introduce to which I should
 invite your particular attention. It is one just applied to the
 case of this disease by a gentleman of Mr. St. John's, whose judgment



and veracity may be relied upon with confidence. I have reference to the Dotura Stramonium, used in various forms, as an external application.

"In the early part of the year 1810," says Mr. — "I was applied to by a coloured woman who had a violent swelling in her right foot. Upon inquiry, I found, that five years before she had suffered severely from Phlegmasia Dolens (after child birth) in the thigh, leg and foot of the same side, and that every year at the warm season her foot swelled four times as large as the other, and continued so painful for three months, that she was obliged to support it on a cushion. When I saw her, she had been confined about a month. As it was too early in the season to procure the plant, and having the Stramonium ointment, I applied it freely, also keeping the foot warm and well wrapped up in flannel. In about a week's time she was able to stand at the wash tub, and before two weeks had elapsed she wore her shoe and went about as usual. There was no return of the disease." — "In the fall of 1810" the Gentleman observes, "I was sent for to see a Lady who suffered with Phlegmasia Dolens; one of the legs, I think the

[Faint, illegible handwriting in cursive script, likely a historical document or letter.]

right one) I saw was white and very much swelled, and I was informed she was much swelled as high as the hip. After a free use of the Ointment the patient was able to walk a few steps in thirty-six hours, and in about a week was perfectly recovered."

In what precise manner, or by what specific virtues, this powerful medicine acts so as to produce such instantaneous relief, is of minor consequence in a practical point of view, and little would be gained by entering into an elaborate or lengthy theoretical discussion upon its Modus operandi. I shall therefore dismiss the subject by saying, that the very respectable source from which the practice originated, and the great success attendant upon it, entitles the article to your particular attention, and to that of medical men generally.

